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MEMORANDUM OF LAW

DATE: December 3, 1997

TO: David Hu, Senior Structural Engineer, Metropolitan Wastewater Department

FROM: City Attorney

SUBJECT: Record Retention Policy for Original Designs and As-Built Drawings

You have asked for advice concerning the retention policy for original designs and as-built drawings for constructed facilities. The North City Water Reclamation Plant is virtually complete, and a question has arisen whether it is necessary or advisable to store records in differing formats, particularly since the advent of Computer Aided Drafting and Design (CADD). Your question is also a concern of the Maps and Records Section of the Development Services Department, which is the keeper of all as-built drawings for City facilities.

BACKGROUND

Standard design practice involves production of original final project plans on mylar sheets, each of which is signed by the engineer responsible for its preparation. These "mylars" are the final plans that are advertised to contractors for bidding. Your question arises from the fact that current practice also involves keeping these final plans in the CADD file format in which they were actually prepared.

During construction, changes to the original plans are typically made to reflect what is actually built. The changes are reflected by "as-built" record drawings. Before the common use of CADD, when mylar sheets were the sole format, changes to the original final design were indicated on as-built drawings by "clouding" on the mylar sheets. In this way, the signed final design and as-built drawings were represented and kept together on the same mylar sheets and stored by Maps and Records. In modern practice, however, as-built drawings are not produced

as marked-up original mylars. Instead, the as-built drawings are created by the design engineer from the original CADD file. These CADD as-built drawings represent the facility as constructed by the contractor and are not signed by the engineer. For the North City Water Reclamation Plant and other Metropolitan Wastewater Department projects, Maps and Records proposes to maintain only the unsigned CADD as-built drawings. As a result of storage limitations, Maps and Records would prefer not to have to retain any original design mylars for MWWDD projects where as-built drawings are represented on CADD files.

QUESTION

Given that unsigned as-built drawings will be produced and retained on CADD files, is it necessary or advisable to also retain the signed original final design plans?

ANSWER

Yes, it is both necessary and advisable to save the signed final design plans. The law imposes a duty to retain signed original final design plans for a specified period of time, generally at least two years after completion date of the contract. Also, retention of signed original final design plans is advisable in order to establish professional design responsibility, should problems or questions in this area later arise. We recommend keeping them for a least ten years after completion of the project, because this is the statute of limitation for latent construction defects.

DISCUSSION

Final design drawings are public records and are subject to the record retention requirements of Government Code section 34090. These requirements were discussed extensively in a Memorandum of Law dated September 24, 1991, a copy of which is attached. Please see pages 6 through 9 of that memorandum for pertinent advice. It is observed there that the law imposes a duty to retain records (generally, for at least two years), and that this requirement applies to final designs. The hard copies must be retained unless a complete and immutable record is made in a different format (e.g., photo, electronic image). In the case of the mylars, originals must be saved unless true, correct, and unchangeable reproductions are made, and this would include a record of the signature and seal of the approving engineer. Cal. Gov't Code § 34090.5.

Even absent this minimum legal requirement, retention of the final designs is advisable as a matter of sound business practice whenever professional design services are contracted. The field of professional engineering in California is legislated in Business and Professions Code sections 6700-6799. Relevant to the present question is section 6735. That section reads as follows:

§ 6735 Preparation of plans, specifications, and reports.

All civil engineering plans, specifications, and reports shall be prepared by a registered civil engineer or by a subordinate under his or her direction, and shall be signed by him or her to indicate his or her responsibility for them. In addition to the signature, all final engineering plans, specifications, and reports shall bear the seal or stamp of the registrant, and the expiration date of the certificate or authority. The registered civil engineer shall use together with his or her signature or seal, the title "civil engineer" or, if he or she has the authority, the title "structural engineer" or, if he or she has the authority, the title "soil engineer." If the final civil engineering plans, specifications, or reports have multiple pages or sheets, the signature, seal or stamp, and expiration date of the certificate or authority need only appear on the originals of the plans and on the original title sheet of the specifications and reports.

The intent of this provision is plain; by requiring that each sheet of the original plans be signed and certified by a licensed professional engineer, the statute ensures to "indicate his or her *responsibility* for them." Business and Professions Code section 6735 makes the civil engineer responsible for the plans which he or she signs. Wynner v. Buxton, 97 Cal. App. 3d 166, 176 (1979). "Responsibility, and specifically the phrase 'responsible charge of the work' means the 'independent control and direction, by the use of initiative, skill, and independent judgment, of the investigation or design of professional engineering work or the direct engineering control of such projects.'" Professional Engineers in California Government v. State Personnel Board, 70 Cal. App. 3d 346, 350 (1977). Very simply, from the signature of the registrant on each sheet, a record is made of the person who is professionally responsible for them. If the records are not kept, it may be difficult to establish who is responsible for them should the need arise.

As-built drawings in CADD format are not signed by the engineer, nor are they required to be. Business and Professions Code section 6735.1 provides that the design engineer is not responsible for the actual construction or supervision of construction. In relevant part, that section states:

The signing of civil engineering plans, specifications, reports, or documents which relate to the design of fixed works shall not impose a legal duty or responsibility upon the person signing the plans, specifications, reports, or documents to supervise the construction of engineering structures or the construction of the fixed works which are the subject of the plans, specifications, reports, or documents.

Since the as-built drawings reflect the construction rather than the design, the engineer is not responsible for them even though he or she may prepare them based on contractor submittals through reference to the original design.

Understandably, the Maps and Records Section may only have interest in keeping a record of what has actually been constructed (i.e., the CADD as-built drawings) and may have little need for the original design plans. However, your department does have an interest in keeping the original designs. Patent or latent defects may be discovered in the project, and contentions could develop concerning whether these are construction defects or errors in design. Contractors may criticize the design in defense of their own work, or MWWD may find itself in either a critical or defensive position with regard to the design. In these instances, it is of obvious benefit to have the original design records so that professional responsibility can be established. The statute of limitation for latent design or construction defects can be up to ten years after substantial completion. Cal. Civ. Proc. Code § 337.15. Accordingly, we advise retention of the original signed design records for at least ten years.

In conclusion, we advise that the original plans be kept in addition to the CADD as-built drawings. There is a minimum mandatory retention period as discussed in the attached September 24, 1991 Memorandum of Law, and it may be of evidentiary advantage to keep them for at least ten years in the event of litigation over latent defects.

CASEY GWINN, City Attorney

By

Frederick M. Ortlieb
Deputy City Attorney

FMO:mb:(x043.2)

Attachment:1

cc Bill Hanley

Al Beingessner

Seyoum Asgedom

Dean Gipson

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